

ABSTRACT OF THE DISCLOSURE

In a method of manufacturing a thin film transistor according to the present invention, an amorphous silicon thin film is firstly formed on an insulating substrate and a planarization layer is formed thereon. Thereafter, the amorphous silicon thin film is crystallized by a solidification process using a laser-irradiation to form a polysilicon thin film. Next, the polysilicon thin film and the planarization layer are patterned to form a semiconductor layer, and a gate insulating layer covering the semiconductor layer is formed. Then, a gate electrode is formed on the gate insulating layer opposite the semiconductor layer. Next, impurities are implanted into the semiconductor layer to form a source region and a drain region opposite each other with respect to the gate electrode, and a source electrode and a drain electrode electrically connected to the source region and the drain region, respectively, are formed.